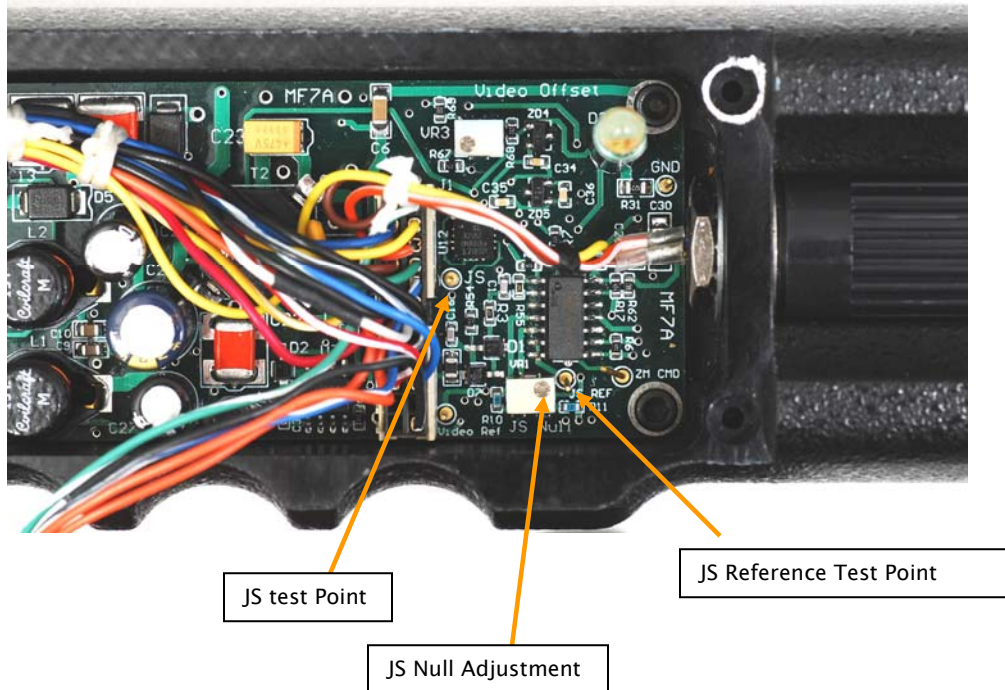


Micro Force V+F2 Calibration Procedure

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Micro Force calibration is required if zoom “creep” is observed when no force is applied to the joystick. The joystick calibration affects operation either driving an analog motor or using its zoom command output to drive a video lens or FI+Z Hand Unit. The Video offset calibration affects only the zoom command output – not external analog motors.

Equipment Required

Power source for the Micro Force:

- Camera with matching MF Y-Cable
- FI+Z Hand Unit with cable (4440, 4540)
- Video Camera, Lens, and Micro Force Cable
- Radio Micro Force with cable

Digital voltmeter with 1mV resolution (or better) and two mini “grabber hooks”.
Fine Blade screwdriver for pot adjustment

Procedure

I. Joystick Calibration

1. Remove the 4 screws that attach the cover to the chassis. Open the cover.
2. Apply power to the Micro Force control.
3. Attach the grabber hooks between the voltmeter and the JS and the JS Reference test pins. Set the voltmeter to read DC volts (millivolts).
4. Set the Speed Pot to “10”.

5. Orient the Micro Force control at approximately 45° from horizontal. Make sure that nothing is contacting the red joystick knob.
6. Adjust the Joystick Null pot until the voltmeter reading is $<1\text{ mV}$.

II. Video Offset Calibration. This calibration can only be performed when the Micro Force is connected to either a Video lens, FI+Z Hand Unit, or Radio Micro Force unit.

1. Connect the Micro Force to a video lens, FI+Z Hand unit, or Radio Micro Force with a matching cable
2. Set the Speed Pot to "0".
3. Attach the grabber hooks between the voltmeter and the pins labeled Video Ref and Zoom Command.
4. Make sure that nothing is contacting the red joystick knob. Adjust the Video Offset pot (VR3) until the voltmeter reading is $< 1\text{ mV}$.